

## AMENDMENTS

### In the Specification:

Please replace the paragraph starting on page 5, line 19 and ending on page 6, line 8 with the following amended paragraph:

With reference to FIG. 2, a block diagram illustrating a low-level imaging system in which the present invention may be employed is shown. The imaging system includes an image sensor 20 for receiving input image data. One example of image sensor 20 is a CCD sensor (charge-coupled device). This is the type of sensor used in desktop scanners. Another example of image sensor 20 is a CIS sensor (contact image sensor), a newer technology that integrates scanning functions into fewer components, allowing scanners to be more compact in size. Other scanning technologies will suffice for input sensor 20. After being scanned by image sensor 20, the input image is in a raw and uncorrected form that must be compensated for.

Please replace the paragraph starting on page 8, line 13 and ending on page 8, line 17 with the following amended paragraph:

Referring now to FIG. 3, a block diagram illustrating a controlling module and RAM table of the present invention is shown.

Based on the incoming image pixel data, controlling module 30, or histogram module, generates an index to histogram table ~~[[30]]~~31.

Please replace the paragraph starting on page 9, line 6 and ending on page 9, line 12 with the following amended paragraph:

With reference to FIG. 4, a block diagram illustrating the major internal modules of the present invention is shown. State machine 45 generates indices used to access histogram table 31 via RAM controls module 44. In addition, color value table index module 40, minimum/maximum detection module 41, average module 42 and frequency edge module 43 monitor the pixel stream and can provide additional information, usually on a line basis.

Please replace the paragraph starting on page 11, line 5 and ending on page 11, line 22 with the following amended paragraph:

Still referring to FIG. 5, the histogram represents an occurrence count in a 3-dimensional color space of YCrCb for each possible color index. This occurrence count is updated by incrementing the count if a maximum value has not been reached (block 53), and storing a new value (block 54). A black and white document would yield histographic results indicating a variety of Y intensity values, but most with negligible Cr and Cb components.

The most predominant Y value would most likely indicate the background intensity of the document, and the most common dark/black (low Y) values might indicate the intensity of the text regions. This information is useful for binarization, and a gamma stage could be implemented to perform contrast enhancement. In this manner, a document with dark gray text on an off-white (yellowed) background could be reproduced perfectly with a white background and black text, if desired. In addition, the number of sharp intensity or color transitions per line or per region of the input image may be detected and used to establish the presence color text.